

## ABSTRACT

A holographic memory reproduction apparatus which makes a wavelength of a reproducing laser beam coincident with a wavelength of a laser beam used for holographic recording when information is reproduced from a holographic recording medium. In the holographic memory reproduction apparatus 10, a temperature adjustment device 26 is attached to a semiconductor laser 12. On the holographic recording medium 16, wavelength information of the laser beam used for recording is recorded as a wavelength address hologram 28. When the information is reproduced, the temperature adjustment device 26 is controlled by a wavelength control device 24 in accordance with a signal beam from the wavelength address hologram 28, thereby making an oscillation peak wavelength of the semiconductor laser 12 coincident with the wavelength of the laser beam used for recording.